ABSTRACT

A moving picture encoding system includes an encoding control unit for setting a target quantizer step size used to encode each of different types of pictures included in a unit group to be encoded, and for performing a control operation to generate and furnish a quantizer step size to an encoding unit so that a ratio among the target quantizer step sizes set for the different types of pictures is a predetermined one. The encoding control unit initially sets the quantizer step size for a macroblock to be encoded first in the current picture currently being encoded to the target quantizer step size set for the picture type of that picture, and, each time the encoding unit encodes each of the macroblocks remaining in the current picture, then updates the quantizer step size initially set for the first macroblock so that the average of the quantizer step sizes used during the encoding of all macroblocks in the current picture finally approaches the target quantizer step size set for the picture type of the current picture. Thus the system is able to control the amount of codes generated during the encoding of each of the plurality of pictures in the unit group while keeping the relative picture quality among the plurality of pictures adjacent with respect to time.

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